REMARKS

Claims

Claims 1-6 and 8-14 are pending in the application with claims 1 and 10 being independent. Claims 1 and 10 have been amended. Claims 7 and 15-18 have been previously canceled. Reconsideration is respectfully requested.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1-6 and 8-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moe (U.S. Patent No. 2,981,005) in view of Hite (U.S. Pat. No. 3,230,628). Claims 12-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moe and Hite, in further view of DiCarlo (U.S. Pat. No. 5,180,388). Applicant respectfully traverses the rejection to independent claim 1.

Claim 1, as amended, defines over the cited prior art or any combination thereof. Claim 1 recites a measuring device for bone screws having different shaft diameters. The measuring device comprises a surface defining multiple receiving grooves for receiving the bone screws. Each receiving groove includes a length measuring scale for measuring the bone screws. A limit stop is associated with each receiving groove to cooperate with a received bone screw. Each limit stop includes two limiting elements that project upwardly from the surface. The limiting elements have a spacing therebetween that defines a selectivity with respect to the shaft diameter of the bone screw which can be received in the associated receiving groove. With this selectivity, the measuring device of the present invention as set forth in claim 1 improves the reliability of measurements taken for bone screws having different shaft diameters. **Each limit stop also defines a channel between the two limiting elements that extends downwardly below the surface.** By positioning the channel below the surface, the bone screws will by placed in a relatively flat orientation in the receiving grooves such that an accurate measurement can be made with the length measuring scales. Otherwise, the bone screws may be skewed relative to the length measuring scales resulting in inaccurate measurements.

Moe discloses a measuring device for measuring a bolt's diameter and length. The measuring device comprises a surface 10 with multiple length measuring scales to measure the bolt's length and limit stops with openings 14-28 at each scale having a selectivity used to measure the bolt's diameter. The limit stops include two limiting elements 12 projecting upwardly from the surface 10 with a space therebetween to define the selectivity. Channels are also defined between the limiting elements 12 and each of the channels is disposed *above the surface*. The bolt rests in the associated channel when the bolt is being measured. As a result of the channel being disposed *above the surface*, when a shaft of the bolt is positioned in the channel, the surface cannot support the bolt at a flat orientation relative to the length measuring scale. Moe does not teach or suggest disposing the channel downwardly *below the surface*, as required by amended claim 1. Therefore, measurements taken with Moe's device have limited accuracy since the bolt is skewed relative to the length measuring scale during measurement. In addition, Moe does not disclose receiving grooves in the surface.

Hite discloses a measuring scale with a surface having a single receiving groove for measuring bone screws. As noted by the Examiner, Hite fails to disclose multiple receiving grooves for receiving bone screws having different shaft diameters, as required by claim 1. Hite only provides a single receiving groove, which can result in errors when used to measure bone screws having different shaft diameters. More specifically, as the transition from screw head to screw shaft varies, different bone screws will sit within the single receiving groove differently such that two bone screws of similar lengths will receive very different measurements. The reason for the variation in measurements is the difference in shaft diameter. When placing bone screws in human bone, precise depth measurement can be critical and the present invention overcomes such variation in measurements by providing multiple receiving grooves for varying shaft diameters.

The Examiner has combined the teaching of a single receiving groove in Hite with the teaching of limit stops with limiting elements in Moe to arrive at the invention set forth in claim 1. Applicant respectfully submits that even if these references can be properly combined, they do not teach each and every limitation required by claim 1. Neither Moe, nor Hite disclose multiple receiving grooves as required by claim 1. As previously

discussed, multiple receiving grooves are used in the present invention to improve the accuracy of length measurements for bone screws. In addition, neither Moe, nor Hite disclose limit stops with two limiting elements that define a channel between the limiting elements that extends downwardly below the surface, as required by claim 1.

In summary, the references, when combined, do not teach each and every limitation required in claim 1 as amended. As a result, Applicant respectfully submits that claim 1 is in condition for allowance. In addition, Applicant respectfully submits that dependent claims 2-6 and 8-9 are also placed in condition for allowance based on their own merits and their dependency to claim 1, and the failure of the references to suggest claim 1.

Applicant respectfully submits that independent claim 10 is also in condition for allowance for the reasons cited above with respect to independent claim 1. In addition, Applicant respectfully submits that dependent claims 11-14 are in condition for allowance based on their merits and their dependency to claim 10, and the failure of the references to suggest claim 10.

Applicant believes the application is now in condition for allowance, which allowance is respectfully solicited. Applicant believes that no additional fees are required, except for the fees included in the attached check, if any. In any event, however, the Commissioner is authorized to charge our Deposit Account No. 08-2789 for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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